

***IN THE UNITED STATES PATENT AND TRADEMARK OFFICE***

Applicant: Takahiro KIMOTO

Title: METHOD OF AND APPARATUS FOR CODING MOVING  
PICTURE, AND METHOD OF AND APPARATUS FOR  
DECODING MOVING PICTURE

Appl. No.: 10/581,609

International Filing Date: 12/06/2004  
371(c) Date: 06/05/2006

Examiner: Unassigned

Art Unit: Unassigned

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR §1.56**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicant in order to comply with Applicant's duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicant does not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

**TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

**RELEVANCE OF EACH DOCUMENT**

Document A1 is a U.S. counterpart of Document A5, which relates to a system for sub-band encoding between motion compensation frames to enable the sub-band encoding between motion compensation frames with high pixel precision by performing inter-frame prediction and in-frame encoding for data in a frequency domain.

Document A2 relates to an image encoding device, image decoding device and their motions which obtains encoded and decoded images of high image quality with low block distortion even in high compressibility by dividing an orthogonal transformation coefficient into plural pieces of zones.

Document A3 relates to a subband dividing device, an image encoding device, a subband reconstructing device, a subband reconstituting device, an image decoding device, and medium which are applicable to moving picture encoding more effectively than before.

Document A6 relates to an inter-motion-compensated-frame band division encoding processing method for prediction and integration synthesis filter bank at most by quantizing, entropy encoding and transmitting the difference of a transformation coefficient block and a prediction coefficient block.

Document A7 relates to a picture coder and its decoder which reduces visual picture quality deterioration by enhancing the accuracy of movement compensation in coding/decoding of a picture signal and to make a coding circuit small by reducing a code quantity.

Documents A4, A8-A13 and A18-A19, listed on the attached PTO/SB/08, were cited as being relevant during the prosecution of the corresponding International application. A copy of the International Search Report is attached setting forth the portion of each document considered relevant by the examiner. An English-language counterpart of the foreign-language documents has not been provided. The absence of a translation or an English-language counterpart document does not relieve the PTO from its duty to consider any submitted document (37 CFR §1.98 and MPEP §609).

Applicant respectfully requests that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

Although Applicant believes that no fee is required for this Request, the Commissioner is hereby authorized to charge any additional fees which may be required for this Request to Deposit Account No. 19-0741.

Respectfully submitted,

Date: November 2, 2006

By



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Substitute for form 1449/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> Date Submitted: November 2, 2006 <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/581,609
				Filing Date	06/05/2006
				First Named Inventor	Takahiro KIMOTO
				Art Unit	Unassigned
				Examiner Name	Unassigned
				Attorney Docket Number	040373-0390

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### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A1	5,311,310	05-10-1994	JOZAWA et al.	

### UNPUBLISHED U.S. PATENT APPLICATION DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Application Document	Filing Date of Cited Document MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Serial Number-Kind Code <sup>2</sup> (if known)			

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	A2	JP 11-275582	10-08-1999	SONY CORP.		A
	A3	JP 10-098715	04-14-1998	MATSUSHITA ELECTRIC		A
	A4	JP 09-098434	04-08-1997	TOSHIBA KK		A
	A5	JP 06-217291	08-05-1994	BELL COMMUNICATIONS		A
	A6	JP 06-217290	08-05-1994	NIPPON TELEG & TELEP		A
	A7	JP 04-322593	11-12-1992	VICTOR CO OF JAPAN LTD.		A
	A8	WO 01/84847 A1	11-08-2001	KONINKLIJKE PHILIPS		
	A9	WO 01/06794 A1	01-25-2001	KONINKLIJKE PHILIPS		

### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	A10	V. BOTTREAU et al., "A Fully Scalable 3D Subband Video Codec," 2001 International Conference on Image Processing, Vol. 2, pp. 1017-1020.	
	A11	P. CAMPISI et al., "Three Dimensional Wavelet Based Approach for a Scalable Video Conference System," 1999 International Conference on Image Processing, Vol. 3, pp. 802-806.	
	A12	T. KIMOTO et al., "3-D Wavelet Transformation with Perfect Reconstruction on Spatial Scalability," Proceedings of the 19 <sup>th</sup> Picture Coding Symposium of Japan, 2004, pp. 51-52.	
	A13	T. KIMOTO et al., "Multi-Resolution MCTF for 3D Wavelet Transformation in High Scalable Video," ISO/IEC JTC1/SC29/WG11, July 2003 8 pages.	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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		Art Unit	Unassigned
		Examiner Name	Unassigned
Sheet	2	of	2
		Attorney Docket Number	040373-0390

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	A14	T. KIMOTO et al., "International Organisation for Standardisation Organization Internationale de Normalisation ISO/IEC JTC1/SC29/2G11 Coding of Moving Pictures and Audio, July 2003, 8 pp.	
	A15	A. SECKER et al., "Motion-Compensated Highly Scalable Video Compression Using an Adaptive 3D Wavelet Transform Based on Lifting," 2001 IEEE, pp. 1029-1032.	
	A16	L. LUO et al., "Motion-Compensated Lifting Wavelet and its Application in Video Coding," 2001 IEEE, pp. 481-484.	
	A17	J. M. SHAPIRO, "Embedded Image Coding Using Zerotrees of Wavelet Coefficients," IEEE Transactions on Signal Processing, Vol. 41:2, December 1991, pp. 3445-3462.	
	A18	J. Y. THAM et al., "Highly Scalable Wavelet-Based Video Codec for Very Low Bit-Rate Environment," IEEE Journal on Selected Areas in Communications, Vol. 16:1, January 1998, pp. 12-27.	
	A19	J. W. WOODS, "A Resolution and Frame-Rate Scalable Subband/Wavelet Video Coder," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 11:9, September 2001, pp. 1035-1043,	

Examiner Signature		Date Considered	
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